



SEQUENCE LISTING

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<120> DETECTION OF CONFORMATIONALLY ALTERED PROTEINS AND PRIONS

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<160> 61

<170> PatentIn Ver. 3.3

<210> 1
<211> 33
<212> PRT
<213> Homo sapiens

<400> 1
Val Val Ala Gly Ala Ala Ala Gly Ala Met His Lys Met Asn Thr
1 5 10 15
Lys Pro Lys Met Lys His Met Ala Gly Ala Ala Ala Ala Gly Ala Val
20 25 30
Val

<210> 2
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 2
Lys Pro Lys Thr Asn Leu Lys His Val Ala Gly Ala Ala Ala Gly
1 5 10 15
Ala Val Val

<210> 3
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 3
 Leu Lys His Val Ala Gly Ala Ala Ala Ala Gly Ala Val Val
 1 5 10

<210> 4
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 4
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
 20 25 30

Gly Leu Met Val Gly Gly Val Val
 35 40

<210> 5
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 5
 Glu Val His His Gln Lys Leu Val Phe Phe Ala Glu Asp Val Gly Ser
 1 5 10 15

Asn Lys Gly Ala Ile Ile Gly Leu
 20

<210> 6
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 6
 Glu Val Arg His Gln Lys Leu Val Phe Phe Ala Glu Asp Val Gly Ser
 1 5 10 15
 Asn Lys Gly Ala Ile Ile Gly Leu
 20

<210> 7
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 7
 Gly Ser Asn Lys Gly Ala Ile Ile Gly Leu Met
 1 5 10

<210> 8
 <211> 27
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 8
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1 5 10 15
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 20 25

<210> 9
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 9
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 1 5 10 15
 Gln Gln Gln Gln Gln Gln Gln
 20

<210> 10
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 10
 Lys Pro Lys Thr Asn Leu Lys His Val Ala Gly Ala Ala Ala Gly
 1 5 10 15

Ala Val Val

<210> 11
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 11
 Met Gly Ile Leu Lys Leu Gln Val Phe Leu Ile Val Leu Ser Val Ala
 1 5 10 15

Leu Asn His Leu Lys Ala Thr Pro Ile Glu Ser His Gln Val Glu Lys
 20 25 30

Arg Lys Cys Asn Thr Ala
 35

<210> 12
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 12
 Met Ala Glu Ser His Leu Leu Gln Trp Leu Leu Leu Leu Pro Thr
 1 5 10 15

Leu Cys Gly Pro Gly Thr Ala Ala Trp
 20 25

<210> 13
 <211> 253
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 13
 Met Ala Asn Leu Gly Cys Trp Met Leu Val Leu Phe Val Ala Thr Trp
 1 5 10 15
 Ser Asp Leu Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 50 55 60
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 65 70 75 80
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly Gly Gly Thr His
 85 90 95
 Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
 100 105 110
 Ala Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
 115 120 125
 Met Leu Gly Ser Ala Met Ser Arg Pro Ile Ile His Phe Gly Ser Asp
 130 135 140
 Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln
 145 150 155 160
 Val Tyr Tyr Arg Pro Met Asp Glu Tyr Ser Asn Gln Asn Asn Phe Val
 165 170 175
 His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
 180 185 190
 Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg
 195 200 205
 Val Val Glu Gln Met Cys Ile Thr Gln Tyr Glu Arg Glu Ser Gln Ala
 210 215 220
 Tyr Tyr Gln Arg Gly Ser Ser Met Val Leu Phe Ser Ser Pro Pro Val
 225 230 235 240
 Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
 245 250

<210> 14
 <211> 254
 <212> PRT
 <213> Mus sp.

<400> 14

Met Ala Asn Leu Gly Tyr Trp Leu Leu Ala Leu Phe Val Thr Met Trp
 1 5 10 15

Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30

Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45

Tyr Pro Pro Gln Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly Trp
 50 55 60

Gly Gln Pro His Gly Gly Ser Trp Gly Gln Pro His Gly Gly Ser Trp
 65 70 75 80

Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly Gly Gly Thr His Asn
 85 90 95

Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Leu Lys His Val Ala
 100 105 110

Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Tyr Met
 115 120 125

Leu Gly Ser Ala Met Ser Arg Pro Met Ile His Phe Gly Asn Asp Trp
 130 135 140

Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr Pro Asn Gln Val
 145 150 155 160

Tyr Tyr Arg Pro Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His
 165 170 175

Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
 180 185 190

Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg Val
 195 200 205

Val Glu Gln Met Cys Val Thr Gln Tyr Gln Lys Glu Ser Gln Ala Tyr
 210 215 220

Tyr Asp Gly Arg Arg Ser Ser Thr Val Leu Phe Ser Ser Pro Pro
 225 230 235 240

Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
 245 250

<210> 15
 <211> 782
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 15
 Met Ala Pro His Arg Pro Ala Pro Ala Leu Leu Cys Ala Leu Ser Leu
 1 5 10 15
 Ala Leu Cys Ala Leu Ser Leu Pro Val Arg Ala Ala Thr Ala Ser Arg
 20 25 30
 Gly Ala Ser Gln Ala Gly Ala Pro Gln Gly Arg Val Pro Glu Ala Arg
 35 40 45
 Pro Asn Ser Met Val Val Glu His Pro Glu Phe Leu Lys Ala Gly Lys
 50 55 60
 Glu Pro Gly Leu Gln Ile Trp Arg Val Glu Lys Phe Asp Leu Val Pro
 65 70 75 80
 Val Pro Thr Asn Leu Tyr Gly Asp Phe Phe Thr Gly Asp Ala Tyr Val
 85 90 95
 Ile Leu Lys Thr Val Gln Leu Arg Asn Gly Asn Leu Gln Tyr Asp Leu
 100 105 110
 His Tyr Trp Leu Gly Asn Glu Cys Ser Gln Asp Glu Ser Gly Ala Ala
 115 120 125
 Ala Ile Phe Thr Val Gln Leu Asp Asp Tyr Leu Asn Gly Arg Ala Val
 130 135 140
 Gln His Arg Glu Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr
 145 150 155 160
 Phe Lys Ser Gly Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe
 165 170 175
 Lys His Val Val Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val
 180 185 190
 Lys Gly Arg Arg Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu
 195 200 205
 Ser Phe Asn Asn Gly Asp Cys Phe Ile Leu Asp Leu Gly Asn Asn Ile
 210 215 220
 His Gln Trp Cys Gly Ser Asn Ser Asn Arg Tyr Glu Arg Leu Lys Ala
 225 230 235 240
 Thr Gln Val Ser Lys Gly Ile Arg Asp Asn Glu Arg Ser Gly Arg Ala
 245 250 255

Arg Val His Val Ser Glu Glu Gly Thr Glu Pro Glu Ala Met Leu Gln
 260 265 270
 Val Leu Gly Pro Lys Pro Ala Leu Pro Ala Gly Thr Glu Asp Thr Ala
 275 280 285
 Lys Glu Asp Ala Ala Asn Arg Lys Leu Ala Lys Leu Tyr Lys Val Ser
 290 295 300
 Asn Gly Ala Gly Thr Met Ser Val Ser Leu Val Ala Asp Glu Asn Pro
 305 310 315 320
 Phe Ala Gln Gly Ala Leu Lys Ser Glu Asp Cys Phe Ile Leu Asp His
 325 330 335
 Gly Lys Asp Gly Lys Ile Phe Val Trp Lys Gly Lys Gln Ala Asn Thr
 340 345 350
 Glu Glu Arg Lys Ala Ala Leu Lys Thr Ala Ser Asp Phe Ile Thr Lys
 355 360 365
 Met Asp Tyr Pro Lys Gln Thr Gln Val Ser Val Leu Pro Glu Gly Gly
 370 375 380
 Glu Thr Pro Leu Phe Lys Gln Phe Phe Lys Asn Trp Arg Asp Pro Asp
 385 390 395 400
 Gln Thr Asp Gly Leu Gly Leu Ser Tyr Leu Ser Ser His Ile Ala Asn
 405 410 415
 Val Glu Arg Val Pro Phe Asp Ala Ala Thr Leu His Thr Ser Thr Ala
 420 425 430
 Met Ala Ala Gln His Gly Met Asp Asp Asp Gly Thr Gly Gln Lys Gln
 435 440 445
 Ile Trp Arg Ile Glu Gly Ser Asn Lys Val Pro Val Asp Pro Ala Thr
 450 455 460
 Tyr Gly Gln Phe Tyr Gly Gly Asp Ser Tyr Ile Ile Leu Tyr Asn Tyr
 465 470 475 480
 Arg His Gly Gly Arg Gln Gly Gln Ile Ile Tyr Asn Trp Gln Gly Ala
 485 490 495
 Gln Ser Thr Gln Asp Glu Val Ala Ala Ser Ala Ile Leu Thr Ala Gln
 500 505 510
 Leu Asp Glu Glu Leu Gly Gly Thr Pro Val Gln Ser Arg Val Val Gln
 515 520 525
 Gly Lys Glu Pro Ala His Leu Met Ser Leu Phe Gly Gly Lys Pro Met
 530 535 540
 Ile Ile Tyr Lys Gly Gly Thr Ser Arg Glu Gly Gly Gln Thr Ala Pro
 545 550 555 560

Ala Ser Thr Arg Leu Phe Gln Val Arg Ala Asn Ser Ala Gly Ala Thr
565 570

Arg Ala Val Glu Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp
580 585 590

Ala Phe Val Leu Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr
595 600 605

Gly Ala Ser Glu Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val
610 615 620

Leu Arg Ala Gln Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly
625 630 635 640

Phe Trp Glu Ala Leu Gly Gly Lys Ala Ala Tyr Arg Thr Ser Pro Arg
645 650 655

Leu Lys Asp Lys Lys Met Asp Ala His Pro Pro Arg Leu Phe Ala Cys
660 665 670

Ser Asn Lys Ile Gly Arg Phe Val Ile Glu Glu Val Pro Gly Glu Leu
675 680 685

Met Gln Glu Asp Leu Ala Thr Asp Asp Val Met Leu Leu Asp Thr Trp
690 695 700

Asp Gln Val Phe Val Trp Val Gly Lys Asp Ser Gln Glu Glu Glu Lys
705 710 715 720

Thr Glu Ala Leu Thr Ser Ala Lys Arg Tyr Ile Glu Thr Asp Pro Ala
725 730 735

Asn Arg Asp Arg Arg Thr Pro Ile Thr Val Val Lys Gln Gly Phe Glu
740 745 750

Pro Pro Ser Phe Val Gly Trp Phe Leu Gly Trp Asp Asp Tyr Trp Trp
755 760 765

Ser Val Asp Pro Leu Asp Arg Ala Met Ala Glu Leu Ala Ala
770 775 780

<210> 16

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 16

Tyr Glu Arg Leu Lys Ala Thr Gln Val Ser Lys Gly Ile Arg Asp Asn
1 5 10 15

Glu Arg Ser Gly Arg Ala Arg Val His Val Ser Glu Glu Gly Thr Glu
20 25 30

Pro Glu Ala Met
35

<210> 17
<211> 146
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 17
Met Ala Gly Pro Leu Arg Ala Pro Leu Leu Leu Ala Ile Leu Ala
1 5 10 15
Val Ala Leu Ala Val Ser Pro Ala Ala Gly Ser Ser Pro Gly Lys Pro
20 25 30
Pro Arg Leu Val Gly Gly Pro Met Asp Ala Ser Val Glu Glu Glu Gly
35 40 45
Val Arg Arg Ala Leu Asp Phe Ala Val Gly Glu Tyr Asn Lys Ala Ser
50 55 60
Asn Asp Met Tyr His Ser Arg Ala Leu Gln Val Val Arg Ala Arg Lys
65 70 75 80
Gln Ile Val Ala Gly Val Asn Tyr Phe Leu Asp Val Glu Leu Gly Arg
85 90 95
Thr Thr Cys Thr Lys Thr Gln Pro Asn Leu Asp Asn Cys Pro Phe His
100 105 110
Asp Gln Pro His Leu Lys Arg Lys Ala Phe Cys Ser Phe Gln Ile Tyr
115 120 125
Ala Val Pro Trp Gln Gly Thr Met Thr Leu Ser Lys Ser Thr Cys Gln
130 135 140
Asp Ala
145

<210> 18
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 18
Glu Glu Glu Val Ser Ala Asp Met Pro Pro Pro Pro Met Asp Ala Ser
1 5 10 15

Val Glu Glu Glu
20

<210> 19
<211> 315
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 19
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15
Phe Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30
Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro Pro Pro Pro Pro
35 40 45
Pro Pro Pro Gln Leu Pro Gln Pro Pro Pro Gln Ala Gln Pro Leu Leu
50 55 60
Pro Gln Pro Gln Pro Pro Pro Pro Pro Pro Pro Gly Pro
65 70 75 80
Ala Val Ala Glu Glu Pro Leu His Arg Pro Lys Lys Glu Leu Ser Ala
85 90 95
Thr Lys Lys Asp Arg Val Asn His Cys Leu Thr Ile Cys Glu Asn Ile
100 105 110
Val Ala Gln Ser Val Arg Asn Ser Pro Glu Phe Gln Lys Leu Leu Gly
115 120 125
Ile Ala Met Glu Leu Phe Leu Leu Cys Ser Asp Asp Ala Glu Ser Asp
130 135 140
Val Arg Met Val Ala Asp Glu Cys Leu Asn Lys Val Ile Lys Ala Leu
145 150 155 160
Met Asp Ser Asn Leu Pro Arg Leu Gln Leu Glu Leu Tyr Lys Glu Ile
165 170 175
Lys Lys Asn Gly Ala Pro Arg Ser Leu Arg Ala Ala Leu Trp Arg Phe
180 185 190
Ala Glu Leu Ala His Leu Val Arg Pro Gln Lys Cys Arg Pro Tyr Leu
195 200 205
Val Asn Leu Leu Pro Cys Leu Thr Arg Thr Ser Lys Arg Pro Glu Glu
210 215 220

Ser Val Gln Glu Thr Leu Ala Ala Ala Val Pro Lys Ile Met Ala Ser
 225 230 235 240

Phe Gly Asn Phe Ala Asn Asp Asn Glu Ile Lys Val Leu Leu Lys Ala
 245 250 255

Phe Ile Ala Asn Leu Lys Ser Ser Ser Pro Thr Ile Arg Arg Thr Ala
 260 265 270

Ala Gly Ser Ala Val Ser Ile Cys Gln His Ser Arg Arg Thr Gln Tyr
 275 280 285

Phe Tyr Ser Trp Leu Leu Asn Val Leu Leu Gly Leu Leu Val Pro Val
 290 295 300

Glu Asp Glu His Ser Thr Leu Leu Ile Leu Gly
 305 310 315

<210> 20
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 20
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 1 5 10 15

Gln

<210> 21
 <211> 89
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 21
 Met Gly Ile Leu Lys Leu Gln Val Phe Leu Ile Val Leu Ser Val Ala
 1 5 10 15

Leu Asn His Leu Lys Ala Thr Pro Ile Glu Ser His Gln Val Glu Lys
 20 25 30

Arg Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe
 35 40 45

Leu Val His Ser Ser Asn Asn Phe Gly Ala Ile Leu Ser Ser Thr Asn
 50 55 60

Val Gly Ser Asn Thr Tyr Gly Lys Arg Asn Ala Val Glu Val Leu Lys
 65 70 75 80

Arg Glu Pro Leu Asn Tyr Leu Pro Leu
 85

<210> 22

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 22

Leu Ala Asn Phe Val
 1 5

<210> 23

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 23

Val Phe Asn Ala Leu Pro Pro Pro Pro Leu Ala Asn Phe Val
 1 5 10

<210> 24

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 24

Phe Leu Val His Ser Ser
 1 5

<210> 25

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 25

Ser Ser His Val Leu Phe Pro Pro Pro Phe Leu Val His Ser Ser
 1 5 10 15

<210> 26

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 26

Met Ala Ser His Arg Leu Leu Leu Leu Cys Leu Ala Gly Leu Val Phe
 1 5 10 15

Val Ser Glu Ala Gly Pro Thr Gly Thr Gly Glu Ser Lys Cys Pro Leu
 20 25 30

Met Val Lys Val Leu Asp Ala Val Arg Gly Ser Pro Ala Ile Asn Val
 35 40 45

Ala Val His Val Phe Arg Lys Ala Ala Asp Asp Thr Trp Glu Pro Phe
 50 55 60

Ala Ser Gly Lys Thr Ser Glu Ser Gly Glu Leu His Gly Leu Thr Thr
 65 70 75 80

Glu Glu Glu Phe Val Glu Gly Ile Tyr Lys Val Glu Ile Asp Thr Lys
 85 90 95

Ser Tyr Trp Lys Ala Leu Gly Ile Ser Pro Phe His Glu His Ala Glu
 100 105 110

Val Val Phe Thr Ala Asn Asp Ser Gly Pro Arg Arg Tyr Thr Ile Ala
 115 120 125

Ala Leu Leu Ser Pro Tyr Ser Tyr Ser Thr Thr Ala Val Val Thr Asn
 130 135 140

Pro Lys Glu
 145

<210> 27

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 peptide

<400> 27

Glu Ser Val Phe Val Leu Gly Ala Leu Pro Pro Pro Pro Leu Ala Gly
 1 5 10 15

Leu Val Phe Val Ser Glu
20

<210> 28
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
<221> MOD_RES
<222> (8)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (25)
<223> Variable amino acid

<400> 28
Val Ala Ala Ala Lys Leu Arg Xaa Val Val Thr Ser Arg Gln Pro Pro
1 5 10 15
Pro Pro Gln Arg Ser Thr Val Val Xaa Arg Leu Lys Ala Ala Val
20 25 30

<210> 29
<211> 33
<212> PRT
<213> Mus sp.

<400> 29
Val Val Ala Gly Ala Ala Ala Ala Gly Ala Val His Lys Leu Asn Thr
1 5 10 15
Lys Pro Lys Leu Lys His Val Ala Gly Ala Ala Ala Ala Gly Ala Val
20 25 30

Val

<210> 30
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
 <221> MOD_RES
 <222> (7)
 <223> Variable amino acid

<400> 30
 Gln Arg Ser Thr Val Val Xaa Arg Leu Lys Ala Ala Ala Val
 1 5 10

<210> 31
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 31
 Ala Ala Ala Val
 1

<210> 32
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<220>
 <221> MOD_RES
 <222> (8)
 <223> Variable amino acid

<400> 32
 Val Ala Ala Ala Lys Leu Arg Xaa Val Val Thr Ser Arg Gln
 1 5 10

<210> 33
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 33
 Val Val Ala Gly Ala Ala Ala Ala Gly Ala Met His Lys Met Lys Pro
 1 5 10 15

Lys Thr Asn Met Lys His Met Ala Gly Ala Ala Ala Ala Gly Ala Val
 20 25 30

Val

<210> 34
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 34
 Val Val Ala Gly Ala Ala Ala Gly Ala Val His Lys Leu Asn Thr
 1 5 10 15

Lys Pro Lys

<210> 35
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 35
 Val Val Ala Gly Ala Ala Ala Gly Ala Val His Lys Leu
 1 5 10

<210> 36
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 36
 Val Val Gly Gly Val Met Leu Gly Ile Ile Ala Gly Lys Asn Ser Gly
 1 5 10 15

Val Asp Glu Ala Phe Phe Val Leu Lys Gln His His Val Glu Tyr Gly
 20 25 30

Ser Asp His Arg Phe Glu Ala Asp
 35 40

<210> 37
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 37
 Leu Gly Ile Ile Ala Gly Lys Asn Ser Gly Val Asp Glu Ala Phe Phe
 1 5 10 15

Val Leu Lys Lys Gln His His Val Glu
 20

<210> 38
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 38
 Leu Gly Ile Ile Ala Gly Lys Asn Ser Gly Val Asp Glu Ala Phe Phe
 1 5 10 15

Val Leu Lys Lys Gln His Arg Val Glu
 20

<210> 39
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 39
 Met Leu Gly Ile Ile Ala Gly Lys Asn Ser Gly
 1 5 10

<210> 40
 <211> 27
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 40
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1 5 10 15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 20 25

<210> 41
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 41
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 1 5 10 15

Gln Gln Gln Gln Gln Gln
 20

<210> 42
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 42
 Val Val Ala Gly Ala Ala Ala Ala Gly Ala Val His Lys Leu Asn Thr
 1 5 10 15

Lys Pro Lys

<210> 43
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 43
 Ala Thr Asn Cys Lys Arg Lys Glu Val Gln His Ser Glu Ile Pro Thr
 1 5 10 15

Ala Lys Leu His Asn Leu Ala Val Ser Leu Val Ile Leu Phe Val Gln
 20 25 30

Leu Lys Leu Ile Gly Met
35

<210> 44
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 44
Trp Ala Ala Thr Gly Pro Gly Cys Leu Thr Pro Leu Leu Leu Leu Leu
1 5 10 15

Trp Gln Leu Leu His Ser Glu Ala Met
20 25

<210> 45
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 45
Gly Val Ile Leu Phe Ile Leu Phe Ser Ile Leu Leu Ile Val Pro Pro
1 5 10 15

Ser Ser Phe Leu Val Met Ser Ser Gly Arg Gln Tyr Tyr Ala Gln Ser
20 25 30

Glu Arg Glu Tyr Gln Thr Ile Cys Met Gln Glu Val Val Arg Glu Met
35 40 45

Met Lys Val Asp Thr Glu Thr Phe Asn Glu Gly Lys Thr Thr Thr Thr
50 55 60

Val Thr His Gln Lys Ile Thr Ile Asn Val Cys Asp His Val Phe Asn
65 70 75 80

Asn Gln Asn Ser Tyr Glu Asp Met Pro Arg Tyr Tyr Val Gln Asn Pro
85 90 95

Tyr Arg His Met Asn Glu Arg Tyr Tyr Arg Asp Glu Tyr Asp Ser Gly
100 105 110

Phe His Ile Ile Pro Arg Ser Met Ala Ser Gly Leu Met Tyr Gly Gly
115 120 125

Leu Gly Gly Val Val Ala Gly Ala Ala Ala Gly Ala Met His Lys
130 135 140

Met Asn Thr Lys Pro Lys Ser Pro Lys Asn Trp Gln Ser His Thr Gly
 145 150 155 160

Gly Gly Gln Gly Trp Gly Gly Gly His Pro Gln Gly Trp Gly Gly Gly
 165 170 175

His Pro Gln Gly Trp Gly Gly Gly His Pro Gln Gly Trp Gly Gly Gly
 180 185 190

His Pro Gln Gly Trp Gly Gly Gly Gly Gln Pro Pro Tyr Arg Asn Gly
 195 200 205

Gly Pro Ser Gly Gln Gly Pro Tyr Arg Ser Gly Gly Thr Asn Trp Gly
 210 215 220

Gly Pro Lys Pro Arg Lys Lys Cys Leu Gly Leu Asp Ser Trp Thr Ala
 225 230 235 240

Val Phe Leu Val Leu Met Trp Cys Gly Leu Asn Ala Met
 245 250

<210> 46

<211> 254

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 46

Gly Val Ile Leu Phe Ile Leu Phe Ser Ile Leu Leu Ile Val Pro Pro
 1 5 10 15

Ser Ser Phe Leu Val Thr Ser Ser Ser Arg Arg Gly Asp Tyr Tyr Ala
 20 25 30

Gln Ser Glu Lys Gln Tyr Gln Thr Val Cys Met Gln Glu Val Val Arg
 35 40 45

Glu Met Met Lys Val Asp Thr Glu Thr Phe Asn Glu Gly Lys Thr Thr
 50 55 60

Thr Thr Val Thr His Gln Lys Ile Thr Ile Asn Val Cys Asp His Val
 65 70 75 80

Phe Asn Asn Gln Asn Ser Tyr Gln Asp Val Pro Arg Tyr Tyr Val Gln
 85 90 95

Asn Pro Tyr Arg Tyr Met Asn Glu Arg Tyr Tyr Arg Asp Glu Trp Asp
 100 105 110

Asn Gly Phe His Ile Met Pro Arg Ser Met Ala Ser Gly Leu Met Tyr
 115 120 125

Gly Gly Leu Gly Gly Val Val Ala Gly Ala Ala Ala Ala Gly Ala Val
 130 135 140

His Lys Leu Asn Thr Lys Pro Lys Ser Pro Lys Asn Trp Gln Asn His
 145 150 155 160
 Thr Gly Gly Gly Gln Gly Trp Gly Gly His Pro Gln Gly Trp Ser
 165 170 175
 Gly Gly His Pro Gln Gly Trp Ser Gly Gly His Pro Gln Gly Trp Gly
 180 185 190
 Gly Gly His Pro Gln Gly Trp Thr Gly Gly Gln Pro Pro Tyr Arg Asn
 195 200 205
 Gly Gly Pro Ser Gly Gln Gly Pro Tyr Arg Ser Gly Gly Thr Asn Trp
 210 215 220
 Gly Gly Pro Lys Pro Arg Lys Lys Cys Leu Gly Val Asp Thr Trp Met
 225 230 235 240
 Thr Val Phe Leu Ala Leu Leu Trp Tyr Gly Leu Asn Ala Met
 245 250

<210> 47

<211> 782

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 47

Ala Ala Leu Glu Ala Met Ala Arg Asp Leu Pro Asp Val Ser Trp Tyr
 1 5 10 15
 Asp Asp Asp Trp Gly Leu Phe Trp Gly Val Phe Ser Pro Pro Glu Phe
 20 25 30
 Gly Gln Lys Val Val Thr Ile Pro Thr Arg Arg Asp Arg Asn Ala Pro
 35 40 45
 Asp Thr Glu Ile Tyr Arg Lys Ala Ser Thr Leu Ala Glu Thr Lys Glu
 50 55 60
 Glu Glu Gln Ser Asp Lys Gly Val Trp Val Phe Val Gln Asp Trp Thr
 65 70 75 80
 Asp Leu Leu Met Val Asp Asp Thr Ala Leu Asp Glu Gln Met Leu Glu
 85 90 95
 Gly Pro Val Glu Glu Ile Val Phe Arg Gly Ile Lys Asn Ser Cys Ala
 100 105 110
 Phe Leu Arg Pro Pro His Ala Asp Met Lys Lys Asp Lys Leu Arg Pro
 115 120 125

Ser Thr Arg Tyr Ala Ala Lys Gly Gly Leu Ala Glu Trp Phe Gly Asp
 130 135 140
 Pro Glu Ser Gly Glu Ala Val Gln Val Pro Gln Ala Arg Leu Val Arg
 145 150 155 160
 Leu Leu Glu Gln Ala Gly Thr Lys Glu Ala Glu Ser Ala Gly Thr Gly
 165 170 175
 Val Trp Leu Tyr Ala Ala Ser Pro Thr Lys Leu Val Phe Ala Asp Asn
 180 185 190
 Ser Asn Leu Ala Gly Ala Lys Pro Leu Val Glu Val Ala Arg Thr Ala
 195 200 205
 Gly Ala Ser Asn Ala Arg Val Gln Phe Leu Arg Thr Ser Ala Pro Ala
 210 215 220
 Thr Gln Gly Gly Glu Arg Ser Thr Gly Gly Lys Tyr Ile Ile Met Pro
 225 230 235 240
 Lys Gly Gly Phe Leu Ser Met Leu His Ala Pro Glu Lys Gly Gln Val
 245 250 255
 Val Arg Ser Gln Val Pro Thr Gly Gly Leu Glu Glu Asp Leu Gln Ala
 260 265 270
 Thr Leu Ile Ala Ser Ala Ala Val Glu Asp Gln Thr Ser Gln Ala Gly
 275 280 285
 Gln Trp Asn Tyr Ile Ile Gln Gly Gln Arg Gly Gly His Arg Tyr Asn
 290 295 300
 Tyr Leu Ile Ile Tyr Ser Asp Gly Gly Tyr Phe Gln Gly Tyr Thr Ala
 305 310 315 320
 Pro Asp Val Pro Val Lys Asn Ser Gly Glu Ile Arg Trp Ile Gln Lys
 325 330 335
 Gln Gly Thr Gly Asp Asp Asp Met Gly His Gln Ala Ala Met Ala Thr
 340 345 350
 Ser Thr His Leu Thr Ala Ala Asp Phe Pro Val Arg Glu Val Asn Ala
 355 360 365
 Ile His Ser Ser Leu Tyr Ser Leu Gly Leu Gly Asp Thr Gln Asp Pro
 370 375 380
 Asp Arg Trp Asn Lys Phe Phe Gln Lys Phe Leu Pro Thr Glu Gly Gly
 385 390 395 400
 Glu Pro Leu Val Ser Val Gln Thr Gln Lys Pro Tyr Asp Met Lys Thr
 405 410 415
 Ile Phe Asp Ser Ala Thr Lys Leu Ala Ala Lys Arg Glu Glu Thr Asn
 420 425 430

Ala Gln Lys Gly Lys Trp Val Phe Ile Lys Gly Asp Lys Gly His Asp
 435 440 445
 Leu Ile Phe Cys Asp Glu Ser Lys Leu Ala Gly Gln Ala Phe Pro Asn
 450 455 460
 Glu Asp Ala Val Leu Ser Val Ser Met Thr Gly Ala Gly Asn Ser Val
 465 470 475 480
 Lys Tyr Leu Lys Ala Leu Lys Arg Asn Ala Ala Asp Glu Lys Ala Thr
 485 490 495
 Asp Glu Thr Gly Ala Pro Leu Ala Pro Lys Pro Gly Leu Val Gln Leu
 500 505 510
 Met Ala Glu Pro Glu Thr Gly Glu Ser Val His Val Arg Ala Arg
 515 520 525
 Gly Ser Arg Glu Asn Asp Arg Ile Gly Lys Ser Val Gln Thr Ala Lys
 530 535 540
 Leu Arg Glu Tyr Arg Asn Ser Asn Ser Gly Cys Trp Gln His Ile Asn
 545 550 555 560
 Asn Gly Leu Asp Leu Ile Phe Cys Asp Gly Asn Asn Phe Ser Glu Trp
 565 570 575
 Ser Val Pro Val Glu Thr Ala Arg Val Val Arg Arg Gly Lys Val Gln
 580 585 590
 Phe Leu Arg Gln Val Val Val Glu Asn Pro Val Val His Lys Phe Gly
 595 600 605
 Ser Ala Val Gly Gly Lys Lys Tyr Lys Leu Gly Ser Lys Phe Tyr Gly
 610 615 620
 Leu Phe Thr Ala Ser Glu Phe Gly Gln Val Glu Arg His Gln Val Ala
 625 630 635 640
 Arg Gly Asn Leu Tyr Asp Asp Leu Gln Val Thr Phe Ile Ala Ala Ala
 645 650 655
 Gly Ser Glu Asp Gln Ser Cys Glu Asn Gly Leu Trp Tyr His Leu Asp
 660 665 670
 Tyr Gln Leu Asn Gly Asn Arg Leu Gln Val Thr Lys Leu Ile Val Tyr
 675 680 685
 Ala Asp Gly Thr Phe Phe Asp Gly Tyr Leu Asn Thr Pro Val Pro Val
 690 695 700
 Leu Asp Phe Lys Glu Val Arg Trp Ile Gln Leu Gly Pro Glu Lys Gly
 705 710 715 720
 Ala Lys Leu Phe Glu Pro His Glu Val Val Met Ser Asn Pro Arg Ala
 725 730 735

Glu	Pro	Val	Arg	Gly	Gln	Pro	Ala	Gly	Ala	Gln	Ser	Ala	Gly	Arg	Ser
			740					745					750		
Ala	Thr	Ala	Ala	Arg	Val	Pro	Leu	Ser	Leu	Ala	Cys	Leu	Ala	Leu	Ser
		755					760					765			
Leu	Ala	Cys	Leu	Leu	Ala	Pro	Ala	Pro	Arg	His	Pro	Ala	Met		
	770					775					780				

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<210> 48
<211> 36
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

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<400> 48
Met Ala Glu Pro Glu Thr Gly Glu Glu Ser Val His Val Arg Ala Arg
 1          5          10          15
Gly Ser Arg Glu Asn Asp Arg Ile Gly Lys Ser Val Gln Thr Ala Lys
 20          25          30
Leu Arg Glu Tyr
 35

```

```
<210> 49
<211> 146
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

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<400> 49
Ala Asp Gln Cys Thr Ser Lys Ser Leu Thr Met Thr Gly Gln Trp Pro
  1          5          10          15
Val Ala Tyr Ile Gln Phe Ser Cys Phe Ala Lys Arg Lys Leu His Pro
  20          25          30
Gln Asp His Phe Pro Cys Asn Asp Leu Asn Pro Gln Thr Lys Thr Cys
  35          40          45
Thr Thr Arg Gly Leu Glu Val Asp Leu Phe Tyr Asn Val Gly Ala Val
  50          55          60
Ile Gln Lys Arg Ala Arg Val Val Gln Leu Ala Arg Ser His Tyr Met
  65          70          75          80
Asp Asn Ser Ala Lys Asn Tyr Glu Gly Val Ala Phe Asp Leu Ala Arg
  85          90          95

```

Arg Val Gly Glu Glu Glu Val Ser Ala Asp Met Pro Gly Gly Val Leu
100 105 110

Arg Pro Pro Lys Gly Pro Ser Ser Gly Ala Ala Pro Ser Val Ala Leu
115 120 125

Ala Val Ala Leu Ile Ala Leu Leu Leu Leu Pro Ala Arg Leu Pro Gly
130 135 140

Ala Met
145

<210> 50
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 50
Glu Glu Glu Val Ser Ala Asp Met Pro Pro Pro Pro Met Asp Ala Ser
1 5 10 15

Val Glu Glu Glu
20

<210> 51
<211> 315
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 51
Gly Leu Ile Leu Leu Thr Ser His Glu Asp Glu Val Pro Val Leu Leu
1 5 10 15

Gly Leu Leu Val Asn Leu Leu Trp Ser Tyr Phe Tyr Gln Thr Arg Arg
20 25 30

Ser His Gln Cys Ile Ser Val Ala Ser Gly Ala Ala Thr Arg Arg Ile
35 40 45

Thr Pro Ser Ser Ser Lys Leu Asn Ala Ile Phe Ala Lys Leu Leu Val
50 55 60

Lys Ile Glu Asn Asp Asn Ala Phe Asn Gly Phe Ser Ala Met Ile Lys
65 70 75 80

Pro Val Ala Ala Ala Leu Thr Glu Gln Val Ser Glu Glu Pro Arg Lys
85 90 95

```

Ser Thr Arg Thr Leu Cys Pro Leu Leu Asn Val Leu Tyr Pro Arg Cys
    100                      105
Lys Gln Pro Arg Val Leu His Ala Leu Glu Ala Phe Arg Trp Leu Ala
    115                      120          125
Ala Arg Leu Ser Arg Pro Ala Gly Asn Lys Lys Ile Glu Lys Tyr Leu
    130                      135          140
Glu Leu Gln Leu Arg Pro Leu Asn Ser Asp Met Leu Ala Lys Ile Val
    145                      150          155          160
Lys Asn Leu Cys Glu Asp Ala Val Met Arg Val Asp Ser Glu Ala Asp
    165                      170          175
Asp Ser Cys Leu Leu Phe Leu Glu Met Ala Ile Gly Leu Leu Lys Gln
    180                      185          190
Phe Glu Pro Ser Asn Arg Val Ser Gln Ala Val Ile Asn Glu Cys Ile
    195                      200          205
Thr Leu Cys His Asn Val Arg Asp Lys Lys Thr Ala Ser Leu Glu Lys
    210                      215          220
Lys Pro Arg His Leu Pro Glu Glu Ala Val Ala Pro Gly Pro Pro Pro
    225                      230          235          240
Pro Pro Pro Pro Pro Pro Pro Gln Pro Gln Pro Leu Leu Pro Gln Ala
    245                      250          255
Gln Pro Pro Pro Gln Pro Leu Gln Pro Pro Pro Pro Pro Pro Pro
    260                      265          270
Pro Pro Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
    275                      280          285
Gln Gln Gln Gln Gln Gln Gln Gln Gln Phe Ser Lys Leu Ser Glu
    290                      295          300
Phe Ala Lys Met Leu Lys Glu Leu Thr Ala Met
    305                      310          315

```

<210> 52

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 52

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Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
  1                      5                      10          15

```

Gln

<210> 53

<211> 89

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 53

Leu	Pro	Leu	Tyr	Asn	Leu	Pro	Glu	Arg	Lys	Leu	Val	Glu	Val	Ala	Asn
1				5					10					15	

Arg	Lys	Gly	Tyr	Thr	Asn	Ser	Gly	Val	Asn	Thr	Ser	Ser	Leu	Ile	Ala
			20					25					30		

Gly	Phe	Asn	Asn	Ser	Ser	His	Val	Leu	Phe	Asn	Ala	Leu	Arg	Gln	Thr
		35					40					45			

Ala	Cys	Thr	Ala	Thr	Asn	Cys	Lys	Arg	Lys	Glu	Val	Gln	His	Ser	Glu
	50					55					60				

Ile	Pro	Thr	Ala	Lys	Leu	His	Asn	Leu	Ala	Val	Ser	Leu	Val	Ile	Leu
65					70					75					80

Phe	Val	Gln	Leu	Lys	Leu	Ile	Gly	Met
					85			

<210> 54

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 54

Val	Phe	Asn	Ala	Leu
1				5

<210> 55

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 55

Val	Phe	Asn	Ala	Leu	Pro	Pro	Pro	Pro	Leu	Ala	Asn	Phe	Val
1					5					10			

<210> 56
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 56
 Ser Ser His Val Leu Phe
 1 5

<210> 57
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 57
 Ser Ser His Val Leu Phe Pro Pro Pro Phe Leu Val His Ser Ser
 1 5 10 15

<210> 58
 <211> 147
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 58
 Glu Lys Pro Asn Thr Val Val Ala Thr Thr Ser Tyr Ser Tyr Pro Ser
 1 5 10 15

Leu Leu Ala Ala Ile Thr Tyr Arg Arg Pro Gly Ser Asp Asn Ala Thr
 20 25 30

Phe Val Val Glu Ala His Glu His Phe Pro Ser Ile Gly Leu Ala Lys
 35 40 45

Trp Tyr Ser Lys Thr Asp Ile Glu Val Lys Tyr Ile Gly Glu Val Phe
 50 55 60

Glu Glu Glu Thr Thr Leu Glu His Leu Glu Gly Ser Glu Ser Thr Lys
 65 70 75 80

Gly Ser Ala Phe Pro Glu Trp Thr Asp Asp Ala Ala Lys Arg Phe Val
 85 90 95

His Val Ala Val Asn Ile Ala Pro Ser Gly Arg Val Ala Asp Leu Val
 100 105 110

Lys Val Met Leu Pro Cys Lys Ser Glu Gly Thr Gly Thr Pro Gly Ala
 115 120 125

Glu Ser Val Phe Val Leu Gly Ala Leu Cys Leu Leu Leu Arg His
 130 135 140

Ser Ala Met
 145

<210> 59
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 59
 Glu Ser Val Phe Val Leu Gly Ala Leu Pro Pro Pro Leu Ala Gly
 1 5 10 15

Leu Val Phe Val Ser Glu
 20

<210> 60
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<220>
 <221> MOD_RES
 <222> (8)
 <223> Variable amino acid

<220>
 <221> MOD_RES
 <222> (25)
 <223> Variable amino acid

<400> 60
 Val Ala Ala Ala Lys Leu Arg Xaa Val Val Thr Ser Arg Gln Pro Pro
 1 5 10 15

Pro Pro Gln Arg Ser Thr Val Val Xaa Arg Leu Lys Ala Ala Val
 20 25 30

<210> 61

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 61

Val	Val	Ala	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Val	His	Lys	Leu	Lys	Pro
1				5				10					15		

Lys	Thr	Asn	Leu	Lys	His	Val	Ala	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Val
			20					25					30		

Val